<div style="border: 2px solid red;">

Not Recommended for New Installations.
Please contact Technical Support for more information.

</div>

Parallel & Serial Port Checker
Model PPC
Documentation Number PPC2095

This product
**Designed and Manufactured
In Ottawa, Illinois
USA**
of domestic and imported parts by

B&B Electronics Mfg. Co. Inc.
707 Dayton Road -- P.O. Box 1040 -- Ottawa, IL 61350
PH (815) 433-5100 -- FAX (815) 433-5105

Internet:
http://www.bb-elec.com
orders@bb-elec.com
support@bb.elec.com

© Copyright 1992 B & B Electronics
Revised August 1992

Objective

The objective of the PC Port Checker is to determine if the parallel and serial ports on your PC are functioning correctly. It is not intended to be a complete diagnostic tool for analyzing the PC ports, but rather a quick go-no-go test.

Getting Started

Copy the software file (supplied with your port checker) "PORT_CK.EXE" and the file "PORTFIND.EXE" onto your computer. Execute "PORT_CK.EXE". The program "PORTFIND.EXE" is used by the "PORT_CK.EXE" program. The port checker software will automatically determine which ports (both parallel and serial) your computer has installed. The software displays the ports and their addresses.

If, after executing the port checker software, your computer does not indicate that there is a port where you think there should be, that is a good indication that the port is either improperly installed or bad.

Performing the Test

The port checker software will guide you through the test. You simply install the port checker board on the port to be tested, and select the proper test number to start the test. Since some computer ports do not require or support all the "standard IBM" handshake lines, we recommend that shortly after your computer is set up, that you run "PORT_CK.EXE ". You will then have a record of how your ports initially tested in the file "PORTCK.DAT". Thereafter, if you do a port check, you can compare the results to the initial check. If the initial port check fails, you should determine if the failure is by design or due to an actual failure. Refer to the specific operator's manual on the port being tested. The port checker is designed to check any "standard IBM" port and they should pass the test.

Note that when you execute the program "PORT_CK.EXE" will create a file labeled "PORTCK.DAT". The software writes to this file each time PORT_CK.EXE is executed. The software records the data from the PORT_CK software. That is, the test that is performed and the results of that test are added to the file "PORTCK.DAT" each time a port check is performed. Included in the file is the date and time that the test was performed.

If you are installing the port checker on the end of a communication cable instead of directly onto the computer, and the test fails, you should try installing the port checker directly onto the computer port to determine if your cable is bad or if your port is bad.

It is important to note that not all ports contain all the standard handshake lines. If your port is specifically designed to drive some external device that does not require the handshake lines, that port may fail the test but still be capable of driving the external device.

The port checker is designed by connecting certain outputs on the serial and parallel ports back to its inputs. Those outputs are then toggled high and low and the port checker software verifies that the inputs are following the output lines. Therefore, it is possible that an output line could have gone bad, and the port checker indicates that an output and input line has failed.

RS-232

The port checker can test either DB-9 or DB-25 RS-232 ports. If you connect the port checker onto a "standard IBM" RS-232 port, the port checker does a complete check of all communication lines and handshake lines. Most RS-232 ports contain the handshake lines and should pass the test.

Parallel

The port checker tests any "standard IBM" parallel port. However, since many devices that connect to the parallel port (such as printers, plotters, etc.) do not use all the parallel handshake lines, cables that are specifically designed for that external device may not contain all the connections. Therefore, it is important to connect the port checker directly onto the computer port. If you install the port checker onto a parallel port or onto the end of the cable driving the external device and the port checker diagnoses a failure, the line that caused the failure may not be needed in your application.

RS-422/RS-530

The port checker uses the RS-232 software to check the RS-422/530 ports. Some 422/530 ports support all RS-232 handshake lines but many do not. Therefore, when checking 422/530 ports, you should check the port after it is first installed and working properly. You will then have a record of how your 422/530 port initially tested in the file " PORTCK.DAT ". Thereafter, if you suspect a problem with your port, you can run the port check and compare these results to the original results.

Special Note on B&B's RS-422/485 I/O Card, Model 422ICCR3: When using the port checker to check this IO card, your port checker jumper should be set to RS-530. When you run the port checker software you will get an RI (Ring Indicator) failure.

The port checker is not designed to test RS-485 cards. If your IO card is set up for RS-485 you will get multiple failures.

If you have an RS-232 to RS-422 converter and are using the port checker to test the output of the converter, you should be using the RS-422 portion of the port checker. However, it is important to note that, depending on how the handshake lines are handled, you might get handshake line failures. If the RS-232 to RS-422 converter is working properly, or if you are checking a standard RS-422 port, you should not get a TXD or RXD failure. If they are working that test should pass.

Exiting the Test

After each test is performed, the software will ask if another test is to be performed or if you want to exit the port checker program. **IMPORTANT:** After exiting the port checker software program you should do a hardware reboot. The port checker software may have altered your system configuration registers that are reconfigured on each hardware reboot.